

Title (en)
POWER TRANSMISSION SYSTEM

Title (de)
KRAFTÜBERTRAGUNGSSYSTEM

Title (fr)
SYSTÈME DE TRANSMISSION DE PUISSANCE

Publication
EP 2892126 B1 20170215 (EN)

Application
EP 13833174 A 20130830

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Abstract (en)
[origin: EP2892126A1] Provided is an electric power transmission system that can efficiently transmit electric power when a battery 204 is charged in a power receiving-side system. An electric power transmission system 100 of the present invention is characterized by at least including: a power transmission antenna 102 that constitutes a series resonator with an inductance component of L 1 and a capacitance component of C 1 , and to which AC power is input; a power receiving antenna 201 that constitutes a series resonator with an inductance component of L 2 and a capacitance component of C 2 , and which receives electromagnetic energy from the power transmission antenna 102 via electromagnetic fields; a rectifying unit that rectifies an output of the power receiving antenna 201 to output DC power; and a load to which an output of the rectifying unit is input, wherein, at times including when a coupling coefficient between the power transmission antenna 102 and the power receiving antenna 201 is k, if a load resistance value is R, the following relationships are established: [Formula 2] $L\ 1\ \neq\ C\ 1 = L\ 2\ \neq\ C\ 2$ and [Formula 6] $L\ 1\ C\ 1 > L\ 2\ C\ 2$ and [Formula 7] $k\ \neq\ L\ 2\ C\ 2\ \neq\ R$

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Cited by
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